

#### DYNAMICALLY ADJUSTABLE SIGNAL DETECTOR

[0059] A dynamically adjustable signal detector receives a differential input signal and outputs a signal indicative of whether a valid signal is being  
5 received based on dynamically adjustable threshold settings. The threshold settings can include differential voltage, peak power, average power, or other suitable settings, and can have a dynamically adjustable value for a selected threshold setting. The  
10 threshold settings and the value for a selected threshold setting can be set using control signals that are set by programmable logic resource circuitry, by soft intellectual property programmed into a programmable logic resource, by a processor, by  
15 circuitry external to a programmable logic resource, or by user input.